



# The public, animal production diseases and policy; what lessons can be learnt from consumer research?

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## Why public perceptions matter

- The sustainability of a production systems also includes how acceptable they are to stakeholders, including the public
- The public are becoming more concerned about how the food they eat is produced
- **However**, they are also becoming less familiar with modern food production
- A greater understanding of societal expectations can lead to greater trust



## Systematic reviews

- Two separate systematic reviews were conducted:
  - Willingness-to-pay (WTP) meta-analysis (n=54)
  - Attitudes narrative review (n=80)
- Protocols were published online prior to reviews commencing
- Four databases were searched for each review using a combination of pre-specified key words
- Results were screened in a two stage process

## Meta-analysis results

- A research gap was identified in relation to interventions to address production diseases
- A small, positive premium was found for higher welfare products. This varied by subgroup;
  - Western and Southern Europe had a higher WTP than Northern Europe and the UK
  - Highest for beef cattle, dairy cattle and layer hens and lowest for pigs
  - Consumers had a higher WTP than citizens (both were positive)

## Thematic analysis results

- Again a research gap was identified in relation to attitudes towards production diseases
- Consumers mostly view modern production systems negatively and voice a number of concerns
  - Naturalness and humane treatment were central to this
- The majority of concerns were also motivated by human health
  - e.g. the use of antibiotics was associated with food safety
- Sociodemographic characteristics were again important

# Thematic analysis results

- Consumers have a number of coping mechanisms to enable them to eat meat
  - A number of barriers to purchasing higher welfare products were identified
- Consumers associated higher welfare/ animal friendly products with improved product quality, safety and healthiness
- **Both reviews support the use of legislative and market based solutions for improving farm animal welfare**



# European Consumer Survey

- 2,330 were collected across the 5 countries and 3 survey versions
- Questions were asked in relation to a range of topics
- Descriptive statistics were obtained and Kruskal-Wallis ANOVA used to establish cross-country differences
- Exploratory factor analysis and structural equation modelling was used to explore the relationship between latent variables

## Results

- The majority of participants were unfamiliar with modern farming methods
- Animal production systems with a greater level of intensification were not viewed favourably
- **All stakeholders were perceived as responsible**





## Results

- The greatest concerns were related to antibiotic usage and resistance and food safety
- In relation to the disease mitigation strategies presented:
  - *Doing nothing* was consistently disagreed with
  - More proactive interventions were the most preferred, such as those to do with housing and enhanced hygiene
  - Those that involved medicines, vaccination and feed supplementation were least preferred

# Conclusions

- The public have very little knowledge about modern production systems
  - Including where the products they eat come from
- Natural and proactive interventions are preferred
- The use of more reactive and “treatment-based” interventions were viewed as less acceptable.
  - **Reassurances should be provided when used**



## Conclusions continued

- Stakeholders need to be more proactive in terms of the information they are providing to the public.
  - This may help with miscommunication and increased trust
- Case studies/ practice changes that would create public good will should be identified and communicated
- Independent assurance is important and stakeholders should be identified who could carry out this role.
  - Greater communication of existing relationships



# Thank you!

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Any questions?

## Further reading

- Clark, B., Stewart, G.B., Panzone, L.A., Kyriazakis, I. and Frewer, L.J. (2017). Citizens, consumers and farm animal welfare: A meta-analysis of willingness-to-pay studies. *Food Policy*, 5, 68, pp.112-127.
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